

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (original) A method of controlling a storage system,
said storage system including a host computer, and a storage control device
that is connected to said host computer to be able to communicate therewith and that is for
inputting/outputting data to/from a storage device based on a data input/output request sent
from said host computer;
said storage control device performing: a first control for managing a storage
area in said storage device using a logical volume that is a logical storage area created on said
storage area and storing, in said logical volume, management information that enables an
operating system running on said host computer to manage said logical volume; a second
control for controlling duplication of data in a first logical volume also to be stored on a real-
time basis in a second logical volume that is different from said first logical volume; and a
third control for making a logical volume identifier and a data set identifier for said first
logical volume that are described in the management information in said first logical volume
and a logical volume identifier and a data set identifier for said second logical volume that are
described in the management information in said second logical volume match each other
while said real-time duplication is being performed;
said method comprising:
said storage system generating a control program for performing a
process for setting said logical volume identifier and said data set identifier for said
first logical volume, which are described in said management information in said first
logical volume, and said logical volume identifier and said data set identifier for said
second logical volume, which are described in said management information in said
second logical volume, to be different from each other; and
said storage system interrupting said duplication and then executing
said control program.

2. (original) A method of controlling a storage system set forth in claim 1, wherein
said control program includes a control program for interrupting said real-time duplication; and
said interruption of said real-time duplication is performed by executing said control program.

3. (original) A method of controlling a storage system set forth in claim 1, wherein
said operating system manages said logical volumes by recording them in a catalog; and,
when said second logical volume is being made to be recognized by said operating system as a logical volume independent of said first logical volume, said second logical volume is recorded in a catalog different from that of said first logical volume.

4. (original) A method of controlling a storage system set forth in claim 1, wherein
said operating system manages said logical volumes by recording them in a catalog; and,
when said second logical volume is being made to be recognized by said operating system as a logical volume independent of said first logical volume, said second logical volume is recorded in the same catalog as that of said first logical volume.

5. (original) A method of controlling a storage system set forth in claim 1, further comprising:
when said second logical volume is being made to be recognized by said operating system as a logical volume independent of said first logical volume, said storage system generates a control program for performing a process for setting said logical volume identifier and said data set identifier for said first logical volume, which are described in said management information in said first logical volume, and said logical volume identifier and said data set identifier for said second logical volume, which are described in said

management information in said second logical volume, to be the same as each other and for restarting said real-time duplication; and

said storage system restarts said real-time duplication by executing said control program.

6. (original) A method of controlling a storage system set forth in claim 1, wherein

said management information includes VTOC.

7. (original) A method of controlling a storage system set forth in claim 1, wherein

said management information includes management information about VSAM in case a data set is managed according to a VSAM format.

8. (original) A method of controlling a storage system set forth in claim 1, wherein

said second logical volume is provided by a storage control device connected to said storage control device, to be able to communicate therewith, that provides said first logical volume.

9. (currently amended) A storage system comprising:
a host computer; and
a storage control device that is connected to said host computer to be able to communicate therewith and that is for inputting/outputting data to/from a storage device based on a data input/output request sent from said host computer, ~~wherein~~

said storage system:

managing a storage area provided by said storage device using a logical volume that is a logical storage area created on said storage area;

storing, in said logical volume, management information that enables an operating system running on said host computer to manage said logical volume;

controlling duplication of data in a first logical volume also to be stored on a real-time basis in a second logical volume that is different from said first logical volume; and

making a logical volume identifier and a data set identifier for said first logical volume that are described in the management information in said first logical volume and a logical volume identifier and a data set identifier for said second logical volume that are described in the management information in said second logical volume match each other while said real-time duplication is being performed;

said storage system further comprising:

means for generating a control program for performing a process for setting said logical volume identifier and said data set identifier for said first logical volume, which are described in said management information in said first logical volume, and said logical volume identifier and said data set identifier for said second logical volume, which are described in said management information in said second logical volume, to be different from each other; and

means for executing said control program after interrupting said real-time duplication to make said second logical volume be recognized as being accessible by said operating system either as a logical volume independent of said first logical volume or as a data set independent of a data set within said primary logical volume.

10. (currently amended) A computer-readable storage medium having a program to be executed by a storage system recorded thereon,

said storage system including: a host computer; and a storage control device that is connected to said host computer to be able to communicate therewith and that is for inputting/outputting data to/from a storage device based on a data input/output request sent from said host computer, and

said storage system: managing a storage area provided by said storage device using a logical volume that is a logical storage area created on said storage area; storing, in said logical volume, management information that enables an operating system running on said host computer to manage said logical volume; controlling duplication of data in a first logical volume also to be stored on a real-time basis in a second logical volume that is different from said first logical volume; and making a logical volume identifier and a data set identifier for said first logical volume that are described in the management information in

said first logical volume and a logical volume identifier and a data set identifier for said second logical volume that are described in the management information in said second logical volume match each other while said real-time duplication is being performed;

~~said program making said storage system realize the functions of: generating a control program~~ comprising code for performing a process for setting said logical volume identifier and said data set identifier for said first logical volume, which are described in said management information in said first logical volume, and said logical volume identifier and said data set identifier for said second logical volume, which are described in said management information in said second logical volume, to be different from each other, ~~and executing said control program~~ after interrupting said duplication to make said second logical volume be recognized as being accessible by said operating system as a logical volume independent of said first logical volume.